

Any day now, science will be able to make a species self-destruct.



How a "gene drive" might work on malaria-carrying mosquitos:

1. Start with a few individuals. Edit the male genome so their female offspring will be sterile.
2. Engineer this change so it's inherited at super-Mendelian rates.
3. Release into the wild. With each generation, the number of fertile females diminishes until finally—
4. The population crashes and malaria has no way to spread.

While scientists race to answer the question, "How can we?" The Hastings Center, a bioethical think tank, asks:



Would deliberate extinction ever be the right thing to do?



It's almost an axiom of environmental ethics that species should be conserved.



Mosquito-borne malaria causes a half-million deaths annually.

Good things could come from this technology.

THE NEW, IMPROVED
THE ETHICS OF HUMANS STICKING THEIR NOSES...

By
Deblucke

Taking out a species is like a game of Jenga. There are a lot of bricks. You might be able to poke out certain species and others you can't.

ANOPHELES MOSQUITO
...INTO THE BIOLOGICAL EVOLUTION OF LIFE.



...most likely one of the hundreds of non-malaria carrying mosquito species would fill in the gap.



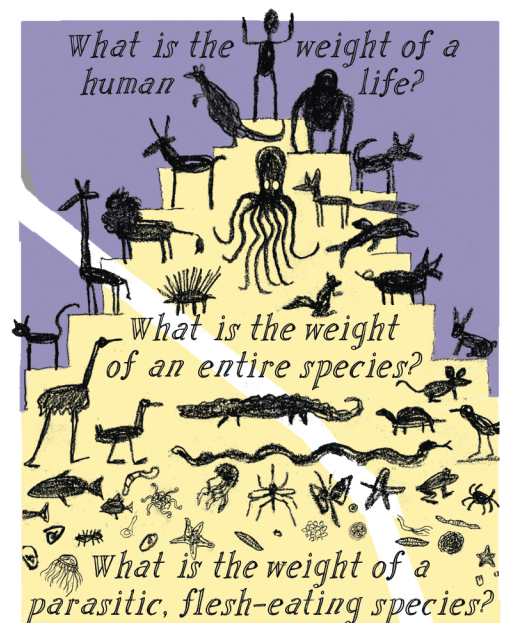
Do we want to protect the mosquito genome?

Or do we look at it systematically: genomes are part of organisms, and they're part of ecosystems, and that is what we should protect.

People think the genome is sacred.



What is the weight of a human life?

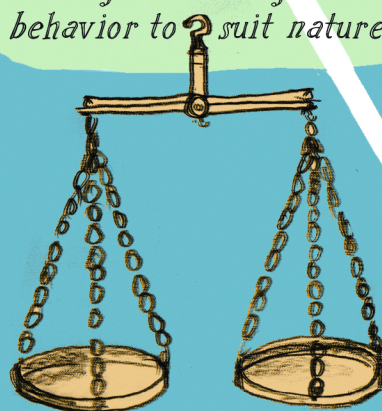


Who gets to decide?



On Nantucket and the Vineyard, Mice Against Ticks is using CRISPR to heritably immunize white-footed mice so they no longer carry the pathogen that causes Lyme. The public chose not to use a gene drive. Instead, thousands of genetically-modified mice will be released to breed and pass on their "improved" genes.

My view is that we will, of course, change the natural world to suit human behavior, but we also ought to change human behavior to suit nature.



Really annoying, biting flies? Probably we should accommodate them.

